

FAST OPERAND FORMATTING FOR A HIGH
PERFORMANCE MULTIPLY-ADD FLOATING POINT-
UNIT

ABSTRACT OF THE DISCLOSURE

Disclosed are a floating point execution unit, and a method of operating a floating point unit, to perform multiply/add operations using a plurality of operands from an instruction having a plurality of operand positions. The floating point unit comprises a multiplier for calculating a product of two of the operands, and an aligner for combining said product and a third of the operands. A first data path is used to supply to the multiplier operands from a first and a second of the operand positions of the instruction, and a second data path is used to supply the third operand to the aligner. The floating point unit further comprises a multiplexer on the second data path for selecting, for use by the aligner, either the operand from the second operand position or the operand from the third operand position of the instruction.